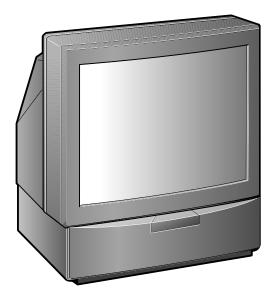


Getting Started Operating Instructions

# **KP-41S4U**



# **Projection TV**

# WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to gualified personnel only.

# **Safety Information**

All TVs operate on extremely high voltages. To prevent fire or electric shock, please follow the safety procedures below. For your protection, refer all servicing to qualified personnel only.

#### For general safety:

- Do not expose the TV to rain or moisture.
- Do not open the rear cover.

#### For safe operations:

- Do not operate the TV on any other voltages, but 220-240 V AC.
- Do not operate the TV if any liquid or solid object falls in it - have it checked immediately.
- Do not keep the set plugged in if you are not going to use it for several days.
- Do not pull on the power cord to disconnect the TV. Pull it out by the plug.
- Do not place anything on the surface of the front panel cover when you open it.

### Important Information

Please read the following information on using and maintaining the TV, for optimum viewing quality.

#### **Picture Quality**

- Poor colour registration (the red, green and blue signals do not overlap properly) may be caused by the influence of the earth's magnetism. Correct this with the convergence adjustment.
- Avoid touching the screen, and take care not to scratch the surface with hard objects.
- Displaying a still picture for long periods of time, for instance, when operating a video game or personal computer and viewing a programme in 16:9 mode, may damag the picture tube. To avoid this, keep the picture contrast level low.

#### Illumination

To obtain a clear picture, do not expose the screen to direct illumination or direct sunlight. If possible, use spot lighting directed down from the ceiling.

#### Installation

- To prevent over heating of the set, do not block the ventilation openings.
- Do not install the TV in a hot or humid place, or in a place subject to direct sunlight, excessive dust or mechanical vibration.
- After transporting the TV directly from a cold to a warm location, or if the room temperature has changed suddenly, pictures may be blurred or show poor colour over portions of the picture. This is because moisture has condensed on the mirrors or lenses inside the TV. Let the moisture evaporate before using the TV.

#### Maintenance

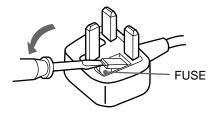
Save the original shipping carton and packing material to use if you ever have to ship your TV. For maximum protection, repack your TV as it was originally packed at the factory.

- To keep the cabinet looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth slightly dampened with a mild detergent solution. Never use strong solvents such as thinner or benzene, or abrasive cleaners since these will damage the cabinet. As a safety precaution, unplug the TV before cleaning it.
- To remove dust from the front of the screen, unplug the TV and wipe gently with a soft cloth lightly dampened with water or a mild detergent solution, using vertical strokes only. Then wipe it with a dry, soft cloth. Never use solvents or thinners for cleaning purposes.
- If the picture turns dark after the TV has been in use for a long period of time, it may be necessary to clean the inside of the TV. Consult qualified service personnel for this.

#### NOTICE FOR CUSTOMERS IN THE UNITED **KINGDOM**

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience. Should the fuse in the plug supplied need to be replaced, a 5 AMP fuse approved by ASTA or BSI to BS 1362 (i.e. marked with  $\textcircled{} \otimes$  or  $\heartsuit$  must be used.

When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board. If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service sation.



#### IMPORTANT

If the plug supplied is not suitable for the socket outlets in your home, it should be cut off and an appropriate plug fitted in accordance with the following instructions:

The wires in this mains lead are coloured in accordance with the following code:

Blue Neutral Brown Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. Do not connect either wire to the earth terminal in the plug which is marked by the letter E or by the safety earth symbol  $\pm$  or coloured green or green and yellow.

#### WARNING

To prevent shock hazard, do not insert the plug cut off from the mains lead into a socket outlet. This plug cannot be used and should be destroved.

- To prevent fire or shock hazard, do not expose the unit to rain or mositure.
- Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only. How to replace the fuse Open the fuse compartment with a blade screwdriver, and replace the fuse.

# Contents

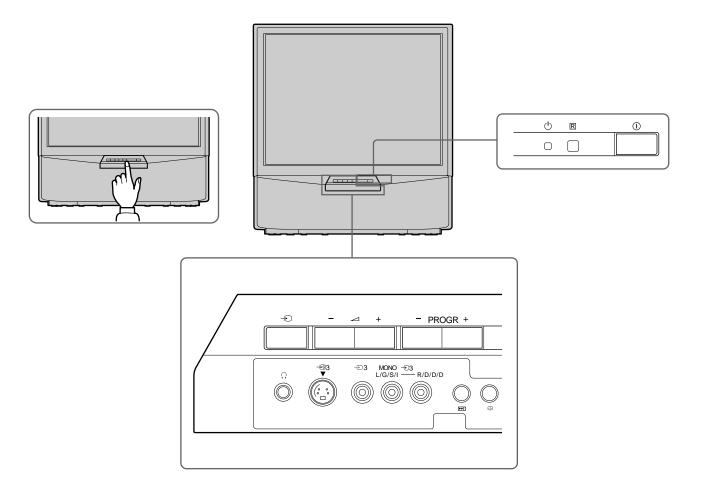
Overview 4
Getting Started 6
Step 1       Preparation       6         Check the Supplied Accessories       6         Insert the Batteries into the Remote Commander       6         Connect the Aerial       6
Step 2 Tuning in to TV Stations
Step 3 Adjusting Colour Registration (CONVERGENCE)
Additional Presetting Functions10Presetting Channels Manually10Manual Fine-Tuning11Sorting Programme Positions11Skipping Programme Positions12Captioning a Station Name12Using Parental Lock13Tuning in a Channel Temporarily13
Operating Instructions
Watching the TV14Switching the TV on and off14Selecting TV Programmes14Adjusting the Volume14Operating the TV Using the Buttons on the TV14Watching Teletext or Video Input15More Convenient Functions15
Adjusting and Setting the TV Using the Menu       16         Adjusting the Picture and Sound       16         Using the Sleep Timer       17
Teletext    18      Direct Access Functions    18
Connecting and Operating Optional Equipment20Connecting Optional Equipment20Selecting Input and Output21Using AV Label Preset22Checking and Selecting the Input and22Output Sources Using the Menu22Remote Control of Other Sony Equipment23
For Your Information24Optimum Viewing Area24Cleaning the Screen25Troubleshooting25Specifications26Television Channel Number Guide27

Getting Started	GB
Operating Instructions	GB

# **Overview**

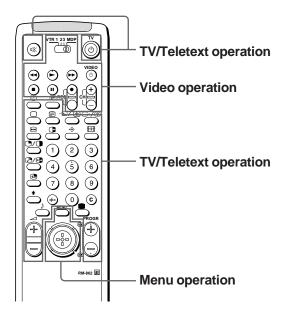
This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information, refer to the pages given next to each description.





Symbol	Name	Refer to page	
0	Main power switch	14	
Ċ	Standby indicator	14	
PROGR+/-	Programme buttons	14	
∠+/-	Volume buttons	14	
$\rightarrow$	Input select buttons	15	
Ω	Headphones jack	20	
\$3,-€>3,-€>3	Input jacks (S video/video/audio)	21	
	Auto Preset button	8	
F. International State (State State Stat	Auto Convergence button	9	

#### **Remote commander**



#### Menu operation

Symbol	Name	Refer to page
MENU	Menu on/off button	See below.
	Joystick for Menu selection	See below.
	Press to confirm selection (OK function)	

#### **Video operation**

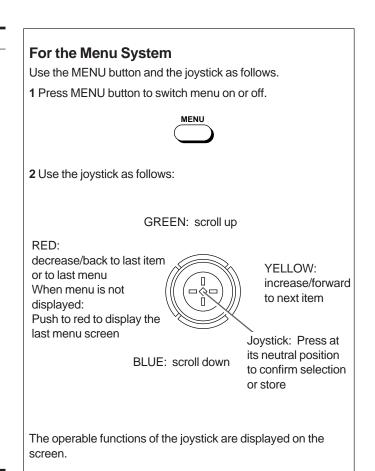
Symbol	Name	Refer to page
VTR1/2/3, MDP	Video equipment selector	23
<b>&lt; → → ■</b> <b>II ●</b> VIDEO <sup>()</sup> CH +/-	Video equipment operation buttons	23

#### No function on this set

**Symbol**: **●**/**●**, **②**/**③**, **●**, **↑**, **●**, **●**, **→**/**②** (for TV operation)

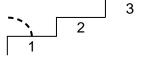
#### **TV/Teletext operation**

Symbol	Name	Refer to page
喙	Mute on/off button	15
ЧΥ	TV Standby button	14
$\bigcirc$	TV power on/TV mode selector button	14
	Teletext button	15
->/€	Input mode selector/	15
	Teletext: Freezing the subpage	18
$\ominus$ /?	Teletext: Reveal button	18
1,2,3,4,5,6, 7,8,9 and 0	Number buttons	14
÷	Double-digit entering button	14
С	Direct channel entering button	13
⊿+/-	Volume control button	14
PROGR +/-	Programme selectors	14
$\sqrt{\diamond}$	Teletext: Page up/page down bu	ttons 18
	Picture adjustment button	16
≥	Sound adjustment button	16
<b>i</b> +	On-screen display button	15
	Time display button	15
<del>E‡3</del>	Button to change Screen Format	15
<i></i>	Teletext: Favourite pages button	19





# **Step 1 Preparation**

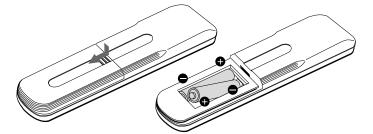


# Check the Supplied Accessories

When you've taken everything out of the carton, check that you have these items:

- RM-862 Remote Commander
- Two IEC designation R6 batteries
- Wrench (1)
- Bracket (2)

# Insert the Batteries into the Remote Commander

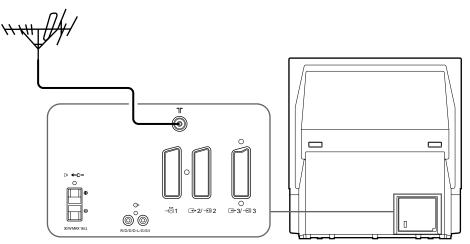


Note: Always remember to dispose of used batteries in an environmentally friendly way.

Remove the cover.

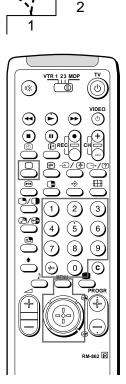
Check the correct polarities.

# **3** Connect the Aerial



Fit an IEC aerial connector attached to 75-ohm coaxial cable (not supplied) to the  $\exists \Gamma$  socket at the rear of the TV.

# Step 2 Tuning in to TV Stations



# Choose a Language

- Depress ① (main power switch) on the TV. The TV will switch on. If the standby indicator on the TV is lit, press
   ○ or a number button on the Remote Commander.
- 2 Press MENU.

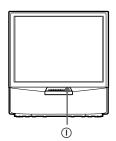
3

- 4 Push the joystick to blue or green to select "Language", then push to yellow.
- 5 Push the joystick to blue or green to select the language you want, then push to yellow.
- 6 Press MENU to restore the normal TV picture.

	PRESET
œ ⊖ † ~	Auto Programme     Manual Programme     AV Label Preset     Programme Sorting     Parental Lock     Language     Convergence

GB

LANGUAGE
English     Deutsch     Français     Español     Suomi     Nederlands     Portugués     Svenska     Dansk     Norsk     Italiano



7



# **2** Preset Channels Automatically

With this function, the TV automatically searches and stores up to 100 channels onto programme positions. If you prefer "Presetting Channels Manually", please refer to page 10 in Additional Presetting Functions.

- Depress ① (main power switch) on the TV. The TV will switch on. If the standby indicator on the TV is lit, press
   ○ or a number button on the Remote Commander.
- 2 Press and hold the ► on the TV until the automatic menu is displayed and the search starts. After all available channels are stored, the normal TV picture is shown.

# Presetting channels automatically by using the Remote Commander

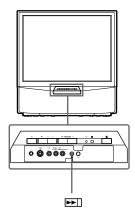
- 1 Press MENU.
- 2 Push the joystick to blue or green to select the symbol 🖻 , then push to yellow.

The PRESET menu appears.

- 3 Push the joystick to blue or green to select "Auto Programme".
- Push to yellow and hold until the AUTO PROGRAMME menu is displayed and the search starts.
   After all available channels have been preset, the normal TV picture is shown.

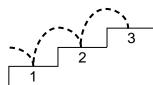
PRESET	
Auto Programme	
→ AV Label Preset Programme Sorting	
<ul> <li>Parental Lock</li> <li>Language</li> </ul>	
Convergence	

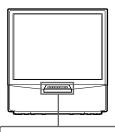
AUTO PF	OGRA	MME	
PROG	SYS	CHAN	LABEL
6	B/G	C26	

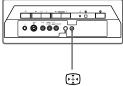


#### Note

You can sort the programme positions to have them appear on screen in the order you like. For details, see "Sorting Programme Positions" on page 11. Step 3 Adjusting Colour Registration (CONVERGENCE)









#### Note

The Auto Convergence function does not work:

- when no signal is input.when the input signal is
- weak.when the screen is
- exposed to spotlights or direct sunlight.when you watch the
- when you watch the teletext broadcast.

# Converge the Red, Green, and Blue Lines

- 1 Press 😥 button on the TV.
- 2 The Auto Convergence function works for about 30 seconds.

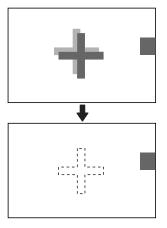
# When the auto convergence function does not work correctly

Adjust the colour registration by selecting the "Convergence" of the PRESET menu.

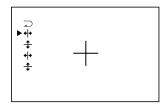
- 1 Press MENU.
- 2 Push the joystick to blue or green to select the symbol ≞, then push to yellow.
  - The PRESET menu appears.
- 3 Push the joystick to blue or green to select "Convergence", then push to yellow.
  The CONVERCENCE mean appears

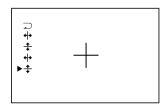
The CONVERGENCE menu appears.

- 4 Push the joystick to blue or green to select "the line" (vertical and horizontal lines in red and blue) you want to adjust. Press the joystick to confirm.
  - Press the joystick to confirm. ++ : red vertical line (left/right adjustment)
  - ↓ : red vertical line (left/light adjustment)
     ↓ : red horizonta line (up/down adjustment)
  - indication in the state of the
  - ++ : blue vertical line (left/right adjustment)
  - + : blue horizontal line (up/down adjustment)
  - The line to adjust is selected.
- 5 Push the joystick to blue or green to converge the selected line with the green line in the centre. Press the joystick to confirm.
- 6 Repeat steps 4 and 5 to adjust the other lines, until all the lines have overlapped to form a white cross.
- 7 Press MENU to restore the normal TV picture.

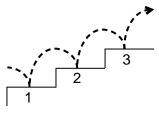


	PRESET
₽ 0 ¢ ~	Auto Programme     Manual Programme     AV Label Preset     Programme Sorting     Parental Lock     Language     Convergence

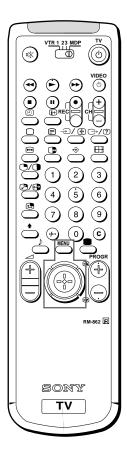




# **Additional Presetting Functions**



#### MANUAL PROGRAMME PRESET



# **Presetting Channels Manually**

Using this function, you can preset channels one by one to different programme positions. This is also convenient to allocate programme numbers to video input sources.

- 1 Press MENU.
- **3** Push to blue or green to select "Manual Programme". Push to yellow to confirm the selection.
- 4 Push to blue or green to select the programme position (PROG) to which you want to preset a channel. Push to yellow to confirm.
- 5 Push to blue or green to select the TV broadcast system (SYS) (I for U.K., B/G for western European countries, D/K for eastern European countries, L for France) or a video input source (AV1, AV2, AV3, YC2, YC3, RGB). Push to yellow to confirm.
- 6 Push to blue or green to select "C" (for terrestrial channels) or "S" (for cable channels). You can also select "C" or "S" by pressing C on the Remote Commander. For selecting "C", press C once, and for "S", press it twice. Push to yellow to confirm.

#### There are two options to preset channels manually:

- a) You know the channel number.
   Please use method "Direct Input".
   or
- **b)** You don't know the channel number. Please use method "Search".

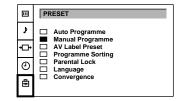
#### 7 a) Direct Input

Select the first number digit of "CHAN" (channel), then the second number digit of "CHAN" with the number buttons on the Remote Commander (e.g. for channel 2, first press 0, then 2).

#### 7 b) Search

Push the joystick to blue or green to search for the next available channel.

- 8 If you want to store the channel, go to step 9. If not, select a new channel using the number button on the Remote Commander or push the joystick to blue or green to resume the search.
- 9 Press the joystick to confirm.
- 10 Repeat steps 4 to 9 to preset other channels.
- 11 Press MENU to restore the normal TV picture.



MANUA	L PRO	GRAMMI	E PRESET	r
PROG	SYS	CHAN	LABEL	AFT
	B/G	C29		ON
□ 1	B/G	C31		ON
□ 2	B/G	C32		ON
□ 3	B/G	C36		ON
4	B/G	C37		ON
□ 5	B/G	C40		ON
6	B/G	C41		ON
	B/G	C44		ON
	B/G	C49		ON
9	B/G	C52		ON

#### MANUAL PROGRAMME PRESET

### **Manual Fine-Tuning**

Normally, the automatic fine-tuning (AFT) function is already operating.

If the picture is distorted, however, you can manually fine-tune the TV to obtain a better picture reception.

- 1 Press MENU.
- **3** Push to blue or green to select "Manual Programme". Push to yellow to confirm.
- 4 Push to blue or green to select the programme number which corresponds to the channel you want to manually fine-tune.
- 5 Push to yellow repeatedly until the AFT position changes colour.
- 6 Push to blue or green to fine-tune the channel frequency (-15 to +15).
- 7 Press the joystick to confirm.
- 8 Repeat steps 4 to 7 to fine-tune other channels.
- 9 Press MENU to restore the normal TV picture.

#### PROGRAMME SORTING

### **Sorting Programme Positions**

This function enables you to sort the programme positions to a preferable order.

- 1 Press MENU.
- **3** Push to blue or green to select "Programme Sorting". Push to yellow to confirm.
- 4 Push to blue or green to select the programme position of the channel you want to change. Press joystick to confirm.
- 5 Push to blue or green to select the programme position of the channel you want to exchange. Press joystick to confirm.
- 6 Repeat steps 4 and 5 to sort other programme positions.
- 7 Press MENU to restore the normal TV picture.

	PRESET
٩	Auto Programme     Manual Programme
¢	AV Label Preset     Programme Sorting
Θ	Parental Lock     Language
₿	Convergence

PROGRAMME SORTING					
PROG	SYS	CHAN	LABEL		
0	B/G	C28	BBC-W		
	B/G	C29	VHS-2		
□ 2	B/G	C35	CNN		
	B/G	C38			
	B/G	C40	MV-CH		
	B/G	C42	VHS-1		
	B/G	C55			
	B/G	C56	8MM		
	B/G	C57			
	B/G	C58			

MANUAL PROGRAMME PRESET						
°000	ROG 0 1 2	SYS B/G B/G B/G	CHAN C29 C31 C32	LABEL	AFT ON ON ON	
	3 4 5 6 7 8	B/G B/G B/G B/G B/G	C36 C37 C40 C41 C44 C49		ON ON ON ON ON	
	9	B/G	C52		ON	

#### MANUAL PROGRAMME PRESET

MANUAL PROGRAMME

PRESET

# **Skipping Programme Positions**

This function enables you to skip unused programme positions when selecting them with the PROGR +/– buttons. However, by using the number buttons you can still select the skipped programme position.

- 1 Press MENU.
- 2 Push the joystick to blue or green to select the symbol 🖻 on the menu screen. Push to yellow to confirm.
- **3** Push to blue or green to select "Manual Programme". Push to yellow to confirm.
- 4 Push to blue or green to select the programme position you want to skip. Push to yellow to confirm.
- 5 Push to blue or green to select "- -" in the position SYS (system). Press the joystick to confirm.
- 6 Repeat steps 4 and 5 to skip other programme positions.
- 7 Press MENU to restore the normal TV picture.

# **Captioning a Station Name**

Channels are automatically labelled during presetting. You can, however, individually name a channel or a video source using up to five characters.

- 1 Press MENU.
- 3 Push to blue or green to select "Manual Programme". Push to yellow to confirm.
- 4 Push to blue or green to select the programme position with the channel you want to label. Push to yellow repeatedly until the first element of the position LABEL is highlighted.
- 5 Push to blue or green to select a letter or a number (select "-" for a blank). Push to yellow to confirm. Select the other four characters in the same way.
- 6 After selecting all characters, press the joystick to confirm.
- 7 Repeat steps 4 to 6 to label other channels or video sources.
- 8 Press MENU to restore the normal TV picture.

MANUAI	. PROC	GRAMM	E PRESET	r
PROG 0 1 2 3 4 5	SYS B/G B/G B/G B/G	CHAN C29 C31 C32 C36 C37 C40	LABEL	AFT ON ON ON ON ON
□ 6 □ 7 □ 8 □ 9	B/G B/G B/G B/G	C41 C44 C49 C52	 	ON ON ON ON

MANUAL PROGRAMME PRESET						
Р	ROG	SYS	CHAN	LABEL	AFT	
	0	B/G	C29		ON	
	1	B/G	C31		ON	
	2	B/G	C32		ON	
	3	B/G	C36		ON	
	4	B/G	C37	-`A´	ON	
	5	B/G	C40	'2 <u>`</u>	ON	
	6	B/G	C41		ON	
	7	B/G	C44		ON	
	8	B/G	C49		ON	
	9	B/G	C52		ON	

#### PARENTAL LOCK

If you try to select a

programme that has

#### The message "LOCKED" appears on the blank TV screen.

been blocked

#### To unblock

Select the channel to unblock in the "PARENTAL LOCK" menu. Press the joystick. The symbol fi disappears.

(", (", (", (, (, (, (, (, (, (, (, (, (, (, (, (,	
RM-862 🖻	
Sony	

#### Note

After you tune in a channel temporarily, you cannot enter the manual preset mode. To store the channel, refer to the "Presetting Channels Manually" on page 10.

### **Using Parental Lock**

This function enables you to prevent children from watching undesirable broadcasts.

- 1 Press MENU.
- 2 Push the joystick to blue or green to select the symbol 🖻 on the menu screen. Push to yellow to confirm.
- 3 Push to green or blue to select "Parental Lock". Push to yellow to confirm.
- 4 Push to green or blue to select the channel you want to block. Press the joystick to confirm. The symbol **1** appears before the programme position to indicate that this channel is now blocked.
- 5 Repeat step 4 to block other channels.
- 6 Press MENU to restore the normal TV picture.

### **Tuning in a Channel Temporarily**

You can tune in to a channel temporarily, even though it has not been preset.

Press C on the Remote Commander. For cable channels, press C 1 twice.

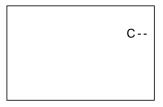
The indication "C" ("S" for cable channels) appears on the screen.

2 Enter the double-digit channel number using the number buttons (e.g. for channel 4, first press 0, then 4). The channel appears. Note that the channel will not be stored.

#### ... PF ► ¢ O ₿

PARENTAL LOCK						
PROG	SYS	CHAN	LABEL			
0	B/G	C28	BBC-W			
	B/G	C29	VHS-2			
□ 2	B/G	C35	CNN			
	B/G	C38				
	B/G	C40	MV-CH			
	B/G	C42	VHS-1			
	B/G	C55				
	B/G	C56	8MM			
	B/G	C57				
	B/G	C58				

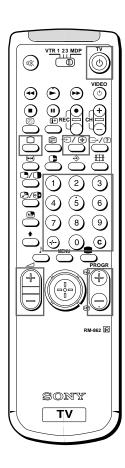
	SYS CHAN B/G C28 B/G C29 B/G C35 B/G C38	N LABEL BBC-W VHS-2 CNN
--	--	----------------------------------



RESET	
Auto Programme Manual Programme AV Label Preset Programme Sorting Parental Lock Language Convergence	

# **Operating Instructions**

# Watching the TV



If no picture appears when you depress ① on the TV and if the standby indicator on the TV is lit, the TV is in standby mode. Press 〇, PROGR+/- or one of the number buttons to switch it on. This section explains the basic functions you use while watching the TV. Most operations are done using the Remote Commander.

# Switching the TV on and off

#### Switching on

Depress ① on the TV.

#### Switching off temporarily

Press  $\bigcirc$  on the Remote Commander. The TV enters standby mode and the standby indicator on the front of the TV lights up in red.

#### To switch on again

 $\mathsf{Press} \bigcirc, \mathsf{PROGR}$  +/–, or one of the number buttons on the Remote Commander.

#### Switching off completely

Depress 0 on the TV and the indicator on the front of the TV lights up in amber.

To save energy, we recommend you switch off your TV completely when the TV is not in use.

### Selecting TV Programmes

Press PROGR +/– or press the number buttons.

#### To select a double-digit number

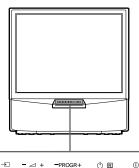
 $Press \div \;$  , then the numbers. For example, if you want to choose 23, press  $\div \;$  , 2 and 3.

### **Adjusting the Volume**

Press ∠ +/-.

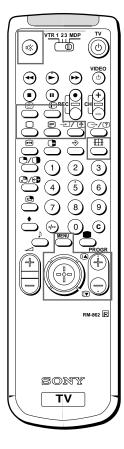
# Operating the TV Using the Buttons on the TV

To select the programme number, press the PROGR +/– buttons. To adjust the volume, press the  $rac{}$  +/– buttons. To select the video input picture, press the  $rac{}$  button.



n ()

	u	r	r	)(	e	•	



For details of the teletext operation, refer to page 18.

For details of the video input picture, refer to page 21.

### Watching Teletext or Video Input

#### Watching teletext

- Press  $\equiv$  to view the teletext. 1
- 2 For teletext operation, enter a 3-digit page number with the number buttons to select a page. For fastext operation, push the joystick to the colour mark which corresponds to the colour-coded menu. For both operations, press  $\sqrt{(PAGE +)}$  for the next page or

 $\diamond$  (PAGE – ) for the preceding page.

**3** To go back to the normal TV picture, press  $\bigcirc$ .

#### Watching a video input picture

- Press Prepeatedly until the desired video input appears. 1
- 2 To go back to the normal TV picture, press  $\bigcirc$ .

### **More Convenient Functions**

#### Displaying the on screen indications

Press 😥 to display the indications. Press again to make the indications disappear.

#### Muting the sound

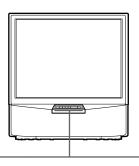
Press ₫. To resume normal sound, press 🕸 again.

#### **Displaying the time**

Press . This function is available only when teletext is broadcast. To make the time display disappear, press @ again.

#### Viewing the programmes in 16:9 mode

Press 🖽. Press again to return to 4:3 mode.





GB

# Adjusting and Setting the TV Using the Menu

#### PICTURE CONTROL

#### SOUND CONTROL

1



## **Adjusting the Picture and Sound**

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste. You can also select dual sound (bilingual) programmes when available or adjust the sound for listening with the headphones.

Press  $\blacksquare$  (for picture) or  $\geq$  (for sound) on the Remote Commander. or

Press MENU and select the symbol  $\blacksquare$  for Picture Control or  $\ge$  for Sound Control. Push to yellow to confirm.

The PICTURE CONTROL or SOUND CONTROL menu appears.

- 2 Push the joystick to blue or green to select the desired item. Push to yellow to confirm. The selected item changes its colour.
- **3** Push to red or yellow to adjust the selected item. Press the joystick to confirm.

For the effect of each control, see the table below.

- 4 Repeat steps 2 and 3 to adjust other items.
- 5 Press MENU to restore the normal TV picture.

	PICTURE CONTROL						
٩	Picture Mode	>					
¢	Contrast Reset						
٩	Format	Normal					
₿							

PICTURE MODE	
<ul> <li>Picture Mode</li> <li>Brightness</li> <li>Colour</li> <li>Sharpness</li> <li>Hue</li> </ul>	User

	SOUND CONTROL	-
	Sound Mode	> User
٩	Reset     Spatial	Off
⇒	Dual Sound	Stereo 0
) 1	<ul> <li>□ ∩ Volume</li> <li>□ ∩ Dual Sound</li> <li>□ Speaker</li> </ul>	Stereo Centre in
	SOUND MODE	
	Mode	User

#### Effect of each control

PICTURE CONTROL	Effect
Picture Mode	User $\leftrightarrow$ Game $\leftrightarrow$ Movie $\leftrightarrow$ Sports $\leftrightarrow$ Live
Brightness	Darker mennender Brighter
Colour	Less """""""""""""""""""""""""""""""""""
Sharpness	Softer
Hue	Greenish
Contrast	Less """""""""""""""""""""""""""""""""""
Reset	Resets picture to the factory preset levels.
Format	4:3: normal 16:9: wide screen effect

#### When "User" is selected in "Picture Mode"

You can preset Brightness, Colour, Sharpness and Hue (NTSC signals only) as follows:

- 1 Push the joystick to blue or green to select the desired item. Push to yellow to confirm.
- 2 Push to red or yellow to adjust. Press the joystick to confirm.
- 3 Push to red to return to the PICTURE CONTROL menu.

#### Note

HUE is available for NTSC colour systems only.

#### Note on LINE OUT

The dual sound mode output from the G→ jack on the rear corresponds to the Headphones Dual Sound settings.

#### When watching a video input source with stereo sound You can select Dual Sound to change the

sound.

SOUND CONTROL	Effect
Sound Mode	Choice between different sound effects User $\leftrightarrow$ Rock $\leftrightarrow$ Jazz $\leftrightarrow$ Pop
Treble	Less uning More
Bass	Less www.www.
Balance	More left
Reset	Resets sound to the factory preset levels.
Spatial	Off: normal On: acoustic sound effect
Dual Sound	A: left channel B: right channel Stereo $\rightarrow$ Mono The selected mode of the A- $\infty$ -B indicator on the TV lights up.
Volume Offset	Presets the volume level for individual programmes.
⊖ Volume	Less memory More
⊖ Dual Sound	A: channel 1 $\rightarrow$ B: channel 2 Stereo $\rightarrow$ Mono
Speaker	Main: sound from TV set Centre in: sound from external amplifier

#### When "User" is selected in "Sound Mode"

You can preset Treble and Bass as follows:

- 1 Push the joystick to blue or green to select the desired item. Push to yellow to confirm.
- 2 Push to red or yellow to adjust. Press the joystick to confirm.
- 3 Push to red to return to the PICTURE CONTROL menu.

### Using the Sleep Timer

You can select a time period after which the TV automatically switches into standby mode.

- 1 Press MENU.
- 2 Push the joystick to blue or green to select the symbol ④ on the menu screen. Push to yellow to confirm.
- **3** Push to yellow. Push to red or yellow to set time delay and press the joystick to confirm.

OFF↔0:30↔1:00↔1:30......3:30↔4:00 ↑ 
 Image: Timer

 J

 Sleep Timer

 OFF

 Image: Timer

 Image: Timer

4 Press the joystick to confirm.

One minute before the TV switches into standby mode, a message is displayed on the screen.

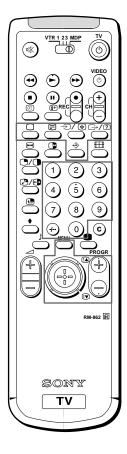
#### TIMER

To switch off the timer Select "OFF" in step 3.

To check the remaining time Press (i+).

To go back to the normal TV picture Press MENU.

# **Teletext**



Note

Teletext errors may occur if the broadcasting signals are weak.

#### TV stations broadcast an information service called Teletext via the TV channels. Teletext service allows you to receive various information pages such as weather reports or news at any time you want.

# **Direct Access Functions**

#### Switching Teletext on and off

- 1 Select the TV channel which carries the teletext broadcast you want to watch.
- 2 Press ≡ to switch on teletext. A teletext page will be displayed (usually the index page). If there is no teletext broadcast, the indication P100 is displayed on a black screen.
- 3 Input three digits for the page number using the number buttons. If you have made a mistake, type in any three digits. Then re-enter the correct page number.
- 4 Press  $\bigcirc$  to return to the normal TV picture.

#### Accessing next or preceding page

Press  $\sqrt{}$  (PAGE+) or  $\Diamond$  (PAGE–). The next or preceding page appears.

#### Superimposing the teletext display on the TV programme

- Press 🗐 once to get Teletext only.
- Press 🗐 twice for Mix mode.

The normal TV screen and the Teletext screen are overlapped.

#### Preventing a teletext page from being updated

- Press 🐵 . The symbol " 🕃 " is displayed on the information line. Press again to cancel.
- Press et to resume normal teletext reception.

#### Revealing hidden information (e.g. for a quiz)

Sometimes pages contain concealed information, such as answers to a quiz. The reveal option lets you disclose the information.

#### Favourite page system

You can store up to four of your favourite teletext pages per Teletext service. In this way you have quick access to the pages you frequently use.

#### Storing pages

- 1 Use the number buttons to select the page you would like to store.
- **3** Push the joystick to the desired colour to store the selected page. The page is now stored on this colour.

Repeat steps 1 to 3 for the other 3 pages.

#### Displaying the favourite pages

- 1 Press ↔.
- 2 Push the joystick to the colour on which the desired page is stored.

Make sure you press  $\Leftrightarrow$ , otherwise the normal Fastext facility operates.

#### Using Fastext

With Fastext you can access pages with one key stroke. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue positions on the Remote Commander.

Push the joystick to the colour mark which corresponds to the colour-coded menu. The page will be displayed after a few seconds.

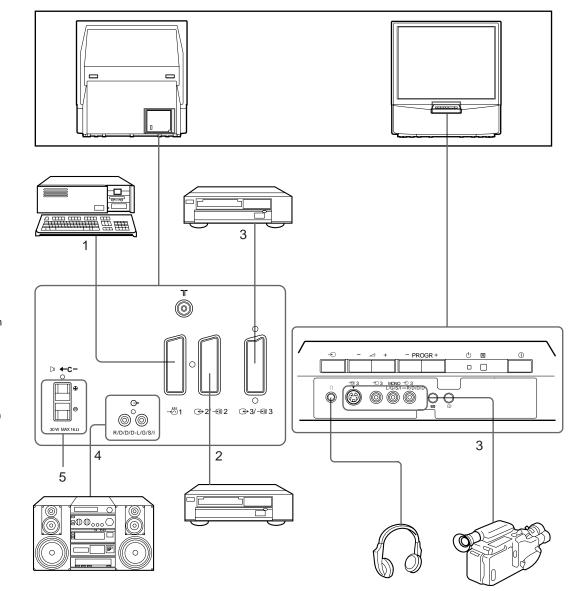
#### Note

Fastext operation is possible, only when the TV station broadcasts Fastext signals. GB

# **Connecting and Operating Optional Equipment**

# **Connecting Optional Equipment**

You can connect optional audio-video equipment to this TV such as a VCR, video disc player, and stereo system.



#### To connect a VCR using the T terminal Connect the aerial output of the VCR to the aerial terminal T of the TV. We recommend that you tune in the video signal to programme number "0". For details, see "Presetting Channels Manually" on page 10.

#### If the picture or the sound is distorted Move the VCR away from the TV.

#### About S video Inputs (Y/C input)

Video signals can be separated into Y (luminance or brightness) and C (chrominance) signals. Separating the Y and C signals prevents them from interfering with one another, therefore it improves picture quality (especially luminance). This TV is equipped with 3 S Video input jacks, through which these separated signals can be input directly.

# When connecting a monaural VCR

#### Note

When you connect the equipment to the -€3/ -€3/≤ 3 connectors on the front panel and C+3/ -€33 connector on the rear panel, turn off the power of the equipment not in use.

#### Acceptable input signal

- 1 Normal audio/video and RGB signal
- 2 Normal audio/video and S video signal
- 3 Normal audio/video and S video signal Normal audio/video and S video signal
- 4 No inputs
- 5 Centre speaker input Set "Speaker" on the SOUND CONTROL menu to "Centre in".

### Available output signal

Video/audio from TV tuner

Video/audio from selected source

No outputs

Video/audio from selected source (the same output source as the  $\bigcirc 2/ - \textcircled{3} 2$  connector)

Audio signal

No outputs

### **Selecting Input and Output**

This section explains how to view the video input picture (of the video source connected to your TV), and how to select the output signal using direct access buttons or the menu system.

#### Selecting input

Press  $\rightarrow$  repeatedly to select the input source. The symbol of the selected input source will appear.

#### To go back to the normal TV picture

 $\mathsf{Press}\, \bigcirc.$ 

# Input modes

Symbol	Input signal
-Ð 1	Audio/video input through the → 😇 1 connector
→Ô	Audio/RGB input through the → 🖄 1 connector
-∋ 2	Audio/video input through the $\textcircled{2}/-\textcircled{3}$ 2 connector
<u>-</u> €92	Audio/S video input through the $\bigcirc$ 2/ $\multimap$ 2 connector
-∋ 3	Audio/video input through $- \mathfrak{D}$ 3 and $\leq 3$ connectors on the front or $\mathfrak{G}$ 3/ $- \mathfrak{S}$ 3 connector on the rear
<del>-8</del> 3	Audio/S video input through the $-$ S 3 connector (4-pin connector) on the front or $\bigcirc$ 3/ $-$ S 3 connector on the rear

You can also select the input mode using the  $\bigcirc$  button on the TV.

#### Selecting input with PROGR +/- or number buttons

You can preset video input sources to the programme positions so that you can select them with PROGR +/- or number buttons. For details, see "Presetting Channels Manually" on page 10.



#### AV LABEL PRESET

### **Using AV Label Preset**

Using this function you can preset the desired input source (e.g.  $\rightarrow \overline{0}$  1, RGB signal) to the respective AV input (AV 1  $\rightarrow \overline{0}$ ). In this way, a connected VCR will automatically switch to the RGB signal.

- 1 Press MENU.
- 2 Push the joystick to blue or green to select the symbol Ė on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select "AV Label Preset". Push to yellow.
- 4 Push to blue or green to select the desired input source. Push to yellow to confirm.
- 5 Push to blue or green to select a letter or number. Push to yellow (select "-" for a blank).
  - Select the other four characters in the same way.
- 6 After selecting all the characters, press the joystick to confirm.
- 7 Repeat steps 4 to 6 to label other input sources.
- 8 Press the MENU button to return to the normal TV picture.

#### VIDEO CONNECTION

### Checking and Selecting the Input and Output Sources Using the Menu

You can display the menu to see which input sources are selected for the TV screen, as well as which output source is selected. You can also select them on the menu display.

- 1 Press MENU.
- 2 Push the joystick to blue or green to select the symbol +□→ on the menu screen. Push to yellow to confirm.

The VIDEO CONNECTION menu appears.

You can see which source is selected for the TV and for the output. If you want to select the input and output on this menu, go on to the next step.

Push to blue or green to select "TV Screen" (input source for TV-screen), or "Output" (output source for ⇒ 2/- € 2 and ⇒ 3/- € 3).

Push to yellow to confirm.

- 4 Push to red or yellow to select the desired source. Press joystick to store.
- 5 Repeat steps 3 to 4 to select the source for other inputs or outputs.
- 6 Press MENU to return to the normal TV picture.

	PRESET			
₽ C Ç ~	Auto Programme     Manual Programme     AV Label Preset     Programme Sorting     Parental Lock     Language     Convergence			

AV LABEL PRESET				
	INPUT	LABEL		
	AV1			
	RGB			
	AV2			
	YC2			
	AV3			
	YC3			

	VIDEO CONNECTION			
٩	■ TV Screen [TV] □ Output [TV]			
₽				
0	Τν			
₿	L →Ē			

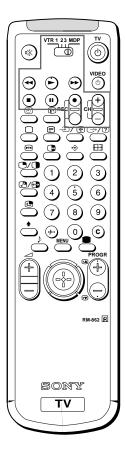
Note

If you select "AUTO" for

automatically becomes the same as the desired

input source.

output, the output source



When recording

When you use the • (record) button, make sure to press this button and the one to the right of it simultaneously.

# Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most of Sony remote-controlled video equipment: beta, 8 mm and VHS VCRs and video disc players.

#### Tuning the Remote Commander to the equipment

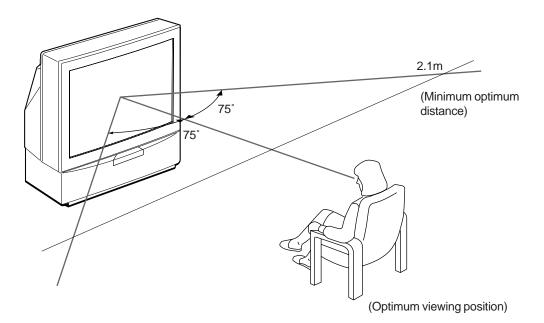
- 1 Set the VTR 1/2/3 MDP selector according to the equipment you want to control:
  - VTR1: Beta VCR
  - VTR2: 8 mm VCR
  - VTR3: VHS VCR
  - MDP: Video disc player
- Use the buttons indicated in the illustration to operate the additional equipment.
   If your video equipment is furnished with a COMMAND MODE selector, set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.
   If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.

# **For Your Information**

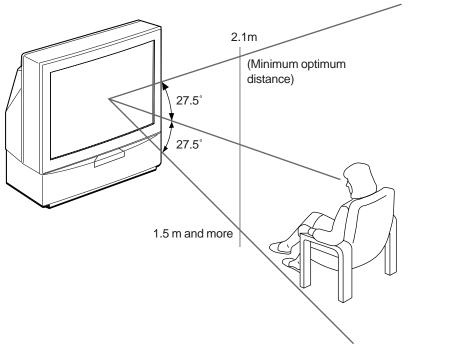
### **Optimum Viewing Area**

For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.

#### Horizontal viewing area



Vertical viewing area



(Optimum viewing position)

# **Cleaning the Screen**

- To clean the screen with a cloth, please use a soft cloth lightly moistened with a mild detergent solution or water. Do not use any type of abrasive pad, alkaline cleaner, scouring powder or solvent, such as alcohol or benzine, or antistatic spray.
- As a safety precaution, unplug the TV before cleaning it.Do not rub, touch, or tap the surface of the screen with
- sharp or abrasive items, like a ball point pen or a screw driver. Otherwise, this type of contact may result in a scratched screen.

# Troubleshooting

Here are some simple solutions to some problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul> <li>Plug the TV in.</li> <li>Press ① on the TV (if <sup>(1)</sup>) indicator is on, press <sup>(1)</sup> or a programme number on the Remote Commander).</li> <li>Check the aerial connection.</li> <li>Check if the selected video source is on.</li> <li>Turn the TV off for 3 or 4 seconds then turn it on again using ①.</li> </ul>
Poor or no picture (screen is dark), but good sound	<ul> <li>Press ● to enter the PICTURE CONTROL menu and adjust the brightness, contrast and colour.</li> </ul>
Poor picture quality when watching an RGB video source	<ul> <li>Press → repeatedly to select → 0.</li> </ul>
Good picture but no sound	<ul> <li>Press ∠ +.</li> <li>Check if "Centre in" is selected on the SOUND CONTROL menu.</li> <li>If is displayed on the screen, press is.</li> </ul>
No colour for colour programmes	<ul> <li>Press ● to enter the PICTURE CONTROL menu, select Reset, then press the joystick to confirm.</li> </ul>
Remote Commander does not function	The batteries are weak.

If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

# **Specifications**

This product complies with the EU Directive 89/336/EEC.

Television system Colour system Channel coverage Projected picture size	B/G/H, D/K, I, L PAL/SECAM NTSC 3.58/4.43 (VIDEO IN) See "Receivable channels and channel displays" on this page and page 27. 41 inches Approx. 103 cm measured diagonally
Rear	Center speaker input terminals, 2 terminals → (L, R), audio outputs - phono jacks → ○ 1, 21-pin Euro connector (CENELEC standard) - inputs for audio and video signals - inputs for RGB - outputs of TV audio and video signals C→ 2/-S 2, 21-pin Euro connector - inputs for audio and video signals - inputs for audio and video signals - outputs for audio and video signals (selectable) C→ 3/-S 3, 21-pin Euro connector - inputs for audio and video signals (selectable) C→ 3/-S 3, 21-pin Euro connector - inputs for audio and video signals - inputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for audio and video signals - inputs for S video - outputs for S video - output
Front	connector) -S 3, S video inputs - 4-pin DIN -S 3, video inputs - phono jacks ≤ 3 (L, R), audio inputs - phono jacks Ω, headphones jack - stereo minijack
Sound output	$2 \times 30$ W (music power) $2 \times 15$ W (RMS)
Centre SP input	30 W (RMS) (using as the centre speaker)
Power consumption Dimensions $(W \times H \times D)$ Mass Supplied accessories Other features	155 W

Design and specifications are subject to change without notice.

#### **Receivable Channels and Channel Displays**

	Receivable	Indication on the
	channels	screen
B/G/H	E212 2169	C02 C03 C04C12 C21C69
CABLE TV (1)	S141	S01 S02S41
CABLE TV (2)	S01S05 M1M10	S42S46 S01S10
	U1U10	S11S20
ITALY	A B C D E F G H H1 H2 2169	C11C69
D/K	R01R12 R21R69	C02C12 C21C69
CABLE TV (1)		S01 S02S41
CABLE TV (2)		S42 S43S46
CABLE TV	BQ, S2141	S02, S03S17,
		S21S41
L	F2F10 F21F69	C01C12 C21C69
<u> </u>	B21B68	C21C68

### **Television Channel Number Guide**

Only the main transmitters are listed. Information regarding the regional sub-relay channel numbers can be obtained by contacting The BBC Engineering Information Dept. (0181) 752 5040.

MAIN TRANSMITTERS	BBC1	BBC2	ITV	CH4
London & South East				<b>c</b> =
1 Bluebell Hill	40	46	43	65
<ul><li>2 Crystal Palace</li><li>3 Dover</li></ul>	26 50	33 56	23 66	30 53
<ul><li>④ Heathfield</li></ul>	50 49	50 52	66 64	53 67
5 Oxford	43 57	63	60	53
South-West	07	00	00	00
6 Beacon Hill	57	63	60	53
<ul><li>6 Beacon Hill</li><li>7 Caradon Hill</li></ul>	22	28	25	32
⑧ Huntshaw Cross	55	62	59	65
Redruth	51	44	41	47
① Stockland Hill	33	26	23	29
Channel Islands				
(1) Fremont Point	51	44	41	47
South	00	45	40	00
Hannington	39	45	42	66
(1) Midhurst	61 31	55 24	58 27	68 21
<ul><li>West</li></ul>	31	24	21	21
B Mendip	58	64	61	54
East	50	04	01	54
(1) Sandy Heath	31	27	24	21
1 Sudbury	51	44	24 41	47
<ul><li>B Tacolneston</li></ul>	62	55	59	65
Midlands (West)	02	00	00	00
Ridge Hill	22	28	25	32
② Sutton Coldfiled	46	40	43	50
The Wrekin	26	33	23	29
Midlands (East)	-		-	-
2 Waltham (	58	64	61	54
Northern Ireland				
Brougher Mountain	22	28	25	32
(a) Divis	31	27	24	21
limavady	55	62	59	65
North				
Belmont     Belmont	22	28	25	32
Emley Moor	44	51	47	41
North-West		~~~	50	05
Winter Hill	55	62	59	65
North-East	22	26	20	22
<ul><li>(29) Bilsdale West Moor</li><li>(30) Caldbeck</li></ul>	33 30	26 34	29 28	23 32
③ Chatton	39	34 45	20 49	32 42
<ul><li>Pontop Pike</li></ul>	56	43 64	61	<del>4</del> 2 54
Scotland	00	01	01	01
3 Angus	57	63	60	53
<ul><li>33 Angus</li><li>34 Black Hill</li></ul>	40	46	43	50
🐵 Sandale	22	67	_	_
<ul> <li>Sandale</li> <li>Caldbeck</li> </ul>	-	-	28	32
<ul> <li>(a) Craigkelly</li> <li>(b) Craigkelly</li> <li>(c) Darvel</li> <li>(c) Durris</li> <li>(c) Eitshal (Lewis)</li> <li>(c) Knock More</li> <li>(c) Rosemalkie</li> </ul>	31	27	24	21
38 Darvel	33	26	23	29
39 Durris	22	28	25	32
Eitshal (Lewis)	33	26	23	29
(1) Keelylang Hill	40	46	43	50
	33	26	23	29
<ul><li>④ Rosemalkie</li><li>④ Rumster Forest</li></ul>	39 31	45 27	49 24	42 21
Selkirk	55	62	24 59	21 65
Wales	55	02	23	05
Wales Blaenplwyf	31	27	24	21
<ul><li></li></ul>	57	63	60	53
<ul><li>W Llanddona</li></ul>	57	63	60	53
<ul><li>Moel-y-Parc</li></ul>	52	45	49	42
Presely	46	40	43	50
(5) Wenvoe	44	51	41	47

